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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/211,469	12/14/1998	OLEG DRAPKIN	0100.990020	9874

7590 05/08/2002

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EXAMINER

LUU, AN T

ART UNIT

PAPER NUMBER

2816

DATE MAILED: 05/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/211,469

Applicant(s)

DRAPKIN ET AL.

Examiner

An T. Luu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 1998.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8 and 10-17 is/are rejected.
- 7) ☒ Claim(s) 7 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 3, 5 and 11-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 3, it is unclear how "a receiving circuit", line 2, is structurally related to "an integrated differential receiver"

In claim 5, the limitation "either of at least an I/O pad supply voltage and a second reference supply voltage for the differential receiver" (emphasis added), lines 2-3, is unclear because it is not known if both of supply voltages or one of supply voltage is required for providing voltage for the differential receiver. The limitation "a second reference supply voltage", line 2, is vague since there is no recitation of a first reference supply voltage in claim. The limitation "the reference voltage", line 3, lacks antecedent basis. Lastly, the limitation "a maximum input signal voltage" is unclear since it is not known how this input is related to the integrated differential receiver (i.e., input for a single gate oxide differential receiver, input for a switchable voltage supply circuit).

Claims 11, 14 and 17 have similar problems as those of claim 5.

As to claims 12-13 and 15- 16, they are rejected for being dependent upon the rejected claims noted above.

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Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 6, 10 and 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by the Brilka reference (U.S. Patent 4,994,756).

Brilka discloses in figures 1, 3 and their associated description an apparatus comprising a single gate oxide differential receiver (101 and 102); and a switchable voltage supply circuit (10,11,12,13), operatively coupled to the single gate oxide differential receiver, switchable through at least one control signal (8 or 9) to select a differential receiver supply voltage for the single gate oxide differential receiver wherein at least one of the selected supply voltages is different from an I/O pad supply voltage 6 (as shown) as required by claim 1.

As to claim 2, it is noted that voltage at node 6 is less than that of node 19 due to resistors 123 and 126.

As to claim 3, figure 1 shows power amplifier 5 being an isolation output buffer.

As to claim 4, figure 1 shows the differential receiver receives a first reference voltage 17 on a first differential input (+ terminal) and an input voltage at node 2 via element 7 on a second differential input (- terminal). It is noted that a maximum voltage level of the input at node 2 is less than the selected supply voltage for the single gate oxide differential receiver due to potential drop through resistors 7, 14, 15 and 18).

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As to claim 6, there are at least two control signals (8 and 9) providing for the switchable voltage supply circuit as shown in figure 1.

The scope of claim 10 is similar to those of claims 1-4. Therefore, it is rejected for the same reasons set forth above.

As to claims 14-16, to the extent to be understood, they appear reciting methods derived from claimed apparatus in claims 1-4 and 6. Therefore, they are rejected as being directed to the method or/and steps derived from the rejected apparatus described in claims 1-4 and 6 above (i.e., steps each having a one-to-one correspondence to the corresponding elements of the apparatus).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over the Brilka reference (U.S. Patent 4,994,756).

Claim 8 claims an application wherein the invention could be utilized. It would have been obvious for one skilled in the art to employ the invention in any environment which has practical purpose(s) since it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art

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apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

Allowable Subject Matter

7. Claims 7 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claim 13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: none of the prior art of record teaches a structural relationship of transistors as required in claims 7 and 13; and a plurality of voltage switching circuits operative to alternately active a common current source to selectively provide the differential receiver supply voltage for the single gate oxide differential receiver as required in claim 9.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


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11. Merit of claims 5, 11 and 17 cannot be determined in this Action due to severeness of
112 issues noted above.

12. Any inquiry concerning this communication or earlier communications from the
examiner should be directed to An T. Luu whose telephone number is 703-308-4922. The
examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Timothy P. Callahan can be reached on 703-308-4876. The fax phone numbers for
the organization where this application or proceeding is assigned are 703-308-7722 for regular
communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to the receptionist whose telephone number is 703-308-0956.

An T. Luu 
May 4, 2002


TIMOTHY P. CALLAHAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800